



## SECTION 12 – MENTAL HEALTH

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## ALCOHOL DEPENDENCE

### *Case Definition for AFHSC Mental Health Report for Health Affairs*

#### **Background**

This case definition for alcohol dependence was developed in November of 2009 by a working group consisting of representatives from AFHSC, the Defense Centers of Excellence (DCoE) for Psychological Health and Traumatic Brain Injury, and the Office of the Assistant Secretary of Defense for Health Affairs (HA). The group developed definitions for this and four other mental health disorders in planning for a periodic AFHSC mental health report for HA.<sup>1</sup> The five conditions covered in the report are relatively common, often chronic in nature, and likely to adversely affect military service. Similar case definitions and incidence rules apply to all five mental health conditions included in the report.

#### **Clinical Description**

Alcohol dependence is a mental illness in which an individual has evidence of physical dependence on alcohol and uses alcohol despite significant areas of related dysfunction and hardship. There is a pattern of repeated alcohol use that often results in tolerance, withdrawal, and compulsive drinking behavior. Denial of an alcohol problem is an inherent component of dependence. (*DSM-IV*)

#### **Case Definition and Incidence Rules**

For surveillance purposes, a case of alcohol dependence is defined as:

- *One inpatient medical encounter* with any of the defining diagnoses of alcohol dependence (see ICD9 code list below) in *any* diagnostic position; or
- *Two outpatient medical encounters*, occurring on separate days, with any of the defining diagnoses of alcohol dependence (see ICD9 code list below) in *any* diagnostic position.
- There is *no date restriction*, i.e., a restriction on the length of the time interval, between the two outpatient medical encounters (see *Development and Revisions* section below)

#### **Incidence rules:**

For individuals who meet the case definition:

- The incidence date is considered the date of the first inpatient or outpatient medical encounter that includes a defining diagnosis of alcohol dependence.
- An individual is considered an incident case only once.

#### **Exclusions:**

- None

<sup>1</sup> Armed Forces Health Surveillance Center. Selected mental health disorders among active component members, U.S. Armed Forces, 2007-2010. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; 17(11): 2-5.



## Codes

The following ICD9 codes are included in the case definition:

Condition	ICD-9-CM codes	CPT Codes
Alcohol Dependence	303.90-303.93 (Other and unspecified alcohol dependence, chronic alcoholism, dipsomania)	NA

## Development and Revisions

This case definition was developed in November of 2009 by a working group consisting of representatives from AFHSC, the Defense Centers of Excellence (DCoE) for Psychological Health and Traumatic Brain Injury, and the Office of the Assistant Secretary of Defense for Health Affairs (HA) for the purpose of periodic AFHSC mental health report for HA.

### *Case Definition Incidence Rule Rationale*

- During the development process significant discussion and consideration were given to a possible two year date restriction between outpatient medical encounters. For the following reasons no date restriction is applied to the case definition: (1) the condition is chronic and the need for a date restriction is less important for certainty of diagnosis, and (2) to maintain consistency with the case definitions and incidence rules applied to the other mental health conditions in the AFHSC Mental Health Report for Health Affairs.

### *Code Set Determination and Rationale*

- ICD9 codes for *alcohol abuse* are not included in this case definition.
- Code lists used by the Agency for Health Research and Quality (AHRQ), Force Health Protection and Readiness (FHP&R) and DCoE were considered in the development of this definition.

## Reports

AFHSC reports on alcohol dependence in the following reports:

- Quarterly: AFHSC Mental Health Report for HA.

## Review

Sept 2010	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards (SMS) working group.
Nov 2009	Case definition developed, reviewed and adopted by HA, DCoE and AFHSC working group.

## Comments

None



## BIPOLAR DISORDER

### *Case Definition for AFHSC Mental Health Report for Health Affairs*

#### Background

This case definition for bipolar disorder was developed in November of 2009 by a working group consisting of representatives from AFHSC, the Defense Centers of Excellence (DCoE) for Psychological Health and Traumatic Brain Injury, and the Office of the Assistant Secretary of Defense for Health Affairs (HA). The group developed definitions for this and four other mental health disorders in planning for a periodic AFHSC mental health report for HA.<sup>1</sup> The five conditions covered in the report are relatively common, often chronic in nature, and likely to adversely affect military service. Similar case definitions and incidence rules apply to all five mental health conditions included in the report.

#### Clinical Description

Bipolar disorder is a psychiatric diagnosis that describes a category of mood disorders defined by the occurrence of one or more episodes of abnormally elevated mood clinically referred to as mania or, if mood elevations are milder, hypomania. Individuals who experience manic episodes also commonly experience depressive episodes or symptoms, or mixed episodes in which features of both mania and depression are present at the same time. The disorder is subdivided into bipolar I, bipolar II, and other types, based on the nature and severity of mood episodes experienced. (*DSM-IV*)

#### Case Definition and Incidence Rules

For surveillance purposes, a case of bipolar disorder is defined as:

- *One inpatient* medical encounter with any of the defining diagnoses of bipolar disorder (see ICD9 code list below) in *any* diagnostic position; or
- *Two outpatient medical encounters*, occurring on separate days, with any of the defining diagnoses of bipolar disorder (see ICD9 code list below) in *any* diagnostic position.
- There is *no date restriction*, i.e., a restriction on the length of the time interval, between the two outpatient medical encounters (see *Development and Revisions* section below)

#### **Incidence rules:**

For individuals who meet the case definition:

- The incidence date is considered the date of the first inpatient or outpatient medical encounter that includes a defining diagnosis of bipolar disorder.
- An individual is considered an incident case only once.

#### **Exclusions:**

- None

<sup>1</sup> Armed Forces Health Surveillance Center. Selected mental health disorders among active component members, U.S. Armed Forces, 2007-2010. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; 17(11): 2-5.



## Codes

The following ICD9 codes are included in the case definition:

Condition	ICD-9-CM codes	CPT Codes
Bipolar Disorder	<p>296.00- 296.06 (bipolar I disorder, single manic episode; includes partial and full remission)</p> <p>296.10-296.16 (manic disorder, recurrent episode)</p> <p>296.40-296.46 (bipolar I, most recent episode, or current, manic)</p> <p>296.50-296.56 (bipolar I, most recent episode, or current, depressed)</p> <p>296.60-296.66 (bipolar I disorder, most recent episode, or current, mixed)</p> <p>296.7 ( bipolar I disorder, most recent episode, or current, unspecified)</p> <p>296.80 ( bipolar disorder, unspecified)</p> <p>296.89 (Other – bipolar II disorder, manic-depressive psychosis, mixed type)</p>	NA

## Development and Revisions

This case definition was developed in November of 2009 by a working group consisting of representatives from AFHSC, the Defense Centers of Excellence (DCoE) for Psychological Health and Traumatic Brain Injury, and the Office of the Assistant Secretary of Defense for Health Affairs (HA) for the purpose of periodic AFHSC mental health report for HA.

### *Case Definition Incidence Rule Rationale*

- During the development process significant discussion and consideration were given to a possible two year date restriction between outpatient medical encounters. For the following reasons no date restriction is applied to the case definition: (1) the condition is chronic and the need for a date restriction is less important for certainty of diagnosis, and (2) to maintain consistency with the case definitions and incidence rules applied to the other mental health conditions in the AFHSC Mental Health Report for Health Affairs.

### *Code Set Determination and Rationale*

- ICD9 codes 296.05-296.06 (bipolar I disorder, partial or full remission) and ICD9 codes 296.10-296.16 (manic disorder, recurrent episode) are included in the code set. AFHSC recognizes that inclusion of these codes may result in overestimation of the incidence of illness in the population by counting some cases for which the onset of illness preceded a person's military service period; on the other hand exclusion of these codes would underestimate the prevalence of illness in the population.



- ICD9 code 296.80 (bipolar disorder, unspecified) is included in the code set due to an AFHSC interest in maintaining a broad definition of bipolar disorder. AFHSC recognizes this is a category that may lack specificity for the diagnosis that meet the standard DMS-IV clinical criteria.
- Per working group consensus, ICD9 codes 296.81 (atypical bipolar disorder, manic) and 296.82 (atypical bipolar disorder, depressed) are not included in the case definition).
- Code lists used by the Agency for Health Research and Quality (AHRQ), Force Health Protection and Readiness (FHP&R) and DCoE were considered in the development of this definition.

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**Reports**

AFHSC reports on bipolar disorder in the following reports:

- Quarterly: AFHSC Mental Health Report for HA.

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**Review**

Sept 2010	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards (SMS) working group.
Nov 2009	Case definition developed, reviewed, and adopted by HA, DCoE, and AFHSC working group

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**Comments**

None



## MAJOR DEPRESSION

### *Case Definition for AFHSC Mental Health Report for Health Affairs*

#### Background

This case definition for major depression was developed in November of 2009 by a working group consisting of representatives from AFHSC, the Defense Centers of Excellence (DCoE) for Psychological Health and Traumatic Brain Injury, and the Office of the Assistant Secretary of Defense for Health Affairs (HA). The group developed definitions for this and four other mental health disorders in planning for a periodic AFHSC mental health report for HA.<sup>1</sup> For the report, the group elected to conduct surveillance on disorders that are relatively common, chronic in nature, and likely to adversely affect military service. Similar case definitions and incidence rules apply to all five mental health conditions included in the report.

#### Clinical Description

Major depression is a mental disorder characterized by an all-encompassing low mood accompanied by five or more of the following symptoms: weight loss or gain, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue, loss of interest or pleasure in normally enjoyable activities, diminished ability to think or concentrate, feelings of worthlessness or excessive guilt, and recurrent thoughts of death or suicide (*DSM IV*).

#### Case Definition and Incidence Rules

For surveillance purposes, a case of major depression is defined as:

- *One inpatient medical encounter* with any of the defining diagnoses of major depression in *any* diagnostic position (see ICD9 code list below); or
- *Two outpatient medical encounters*, occurring on separate days, with any of the defining diagnoses of major depression in any diagnostic position (see ICD9 code list below).
- There is *no date restriction*, i.e., a restriction on the length of the time interval, between the two outpatient medical encounters (see *Development and Revisions* section below).

#### *Incidence rules:*

For individuals who meet the case definition:

- The incidence date is considered the date of the first inpatient or outpatient medical encounter that includes a defining diagnosis of major depression.
- An individual is considered an incident case only once.

#### *Exclusions:*

- None

<sup>1</sup> Armed Forces Health Surveillance Center. Selected mental health disorders among active component members, U.S. Armed Forces, 2007-2010. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; 17(11): 2-5.



## Codes

The following ICD9 codes are included in the case definition:

Condition	ICD-9-CM codes	CPT Codes
Major Depression	296.20-296.26 (major depressive disorder, single episode; includes partial and full remission) 296.30-296.36 (major depressive disorder, recurrent episode) 296.90 (unspecified episodic mood disorder) 311 (depressive disorder, not elsewhere classified)	NA

## Development and Revisions

This case definition was developed in November of 2009 by a working group consisting of representatives from AFHSC, the Defense Centers of Excellence (DCoE) for Psychological Health and Traumatic Brain Injury, and the Office of the Assistant Secretary of Defense for Health Affairs (HA) for the purpose of periodic AFHSC mental health report for HA.

### *Case Definition Incidence Rule Rationale*

- During the development process significant discussion and consideration were given to a possible two year date restriction between outpatient medical encounters. For the following reasons no date restriction is applied to the case definition: (1) the condition is chronic and the need for a date restriction is less important for certainty of diagnosis, and (2) to maintain consistency with the case definitions and incidence rules applied to the other mental health conditions in the AFHSC Mental Health Report for Health Affairs.

### *Code Set Determination and Rationale*

- ICD9 codes 296.25-296.26 (major depressive disorder, in remission) and ICD-9 codes 296.30-296.36 (major depressive disorder, recurrent episode) are included in the code set. AFHSC recognizes that inclusion of these codes may result in overestimation of the incidence of illness in the population by counting some cases for which the onset of illness preceded a person's military service period; on the other hand exclusion of these codes would underestimate the prevalence of illness in the population.
- ICD9 code 311 (depressive disorder not elsewhere classified) is included in the code set due to an AFHSC interest in maintaining a broad definition of depression. AFHSC recognizes this is a category that may lack specificity for diagnoses that meet the standard DSM-IV clinical criteria.
- Per working group consensus, ICD9 codes 296.82 (atypical depressive disorder), 296.99 (other specified episodic mood disorder), and 300.4 (dysthymic disorder) are not included in the case definition.
- Per working group consensus, ICD9 code 293.83 (mood disorder in conditions classified elsewhere), is not included in the case definition. The disorder has an organic etiology, is transient, and is inconsistent with the rest of the diagnoses included in the case definition, where the etiology is presumed to be not organic in nature and chronic.
- Code lists used by the Agency for Health Research and Quality (AHRQ), Force Health Protection and Readiness (FHP&R) and DCoE were considered in the development of this definition.





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**Reports**

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AFHSC reports on major depression in the following reports:

- Quarterly: AFHSC Mental Health Report for HA.

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**Review**

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Nov 2010	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards (SMS) working group.
Nov 2009	Case definition developed, reviewed, and adopted by HA, DCoE and AFHSC work group.

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**Comments**

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None



## POST TRAUMATIC STRESS DISORDER (PTSD)

### Background

This case definition for PTSD was originally developed in September of 2008 by the Department of Defense (DoD) Interagency PTSD and Traumatic Brain Injury (TBI) standardization committee. In November of 2009, a working group consisting of representatives from AFHSC, the Defense Centers of Excellence (DCoE) for Psychological Health and Traumatic Brain Injury, and the Office of the Assistant Secretary of Defense for Health Affairs (HA) reviewed the case definition in planning for a periodic AFHSC mental health report for HA.<sup>1</sup>

### Clinical Description

Posttraumatic stress disorder commonly referred to by its acronym, PTSD, is a severe anxiety disorder that can develop after exposure to any event that results in psychological trauma. The event may involve the threat of death to oneself or to someone else, or a threat to one's own or someone else's physical, sexual, or psychological integrity, overwhelming the individual's psychological defenses.

Diagnostic symptoms include re-experiencing the original trauma(s) through flashbacks or nightmares; avoidance of stimuli associated with the trauma; and increased arousal, such as difficulty in falling asleep or in staying asleep, anger, and hypervigilance. Formal diagnostic criteria require that the symptoms last more than one month and cause significant impairment in social, occupational, or other important areas of functioning, e.g., problems with work and/or relationships. (*DSM-IV*)

### Case Definition and Incidence Rules

For surveillance purposes, a case of PTSD is defined as:

- *One inpatient medical encounter* with the defining diagnoses of PTSD in *any* diagnostic position (see ICD9 code list below), or
- *Two outpatient medical encounters*, occurring on separate days, with the defining diagnoses of PTSD in *any* diagnostic position (see ICD9 code list below)
- There is *no date restriction*, i.e., a restriction on the length of the time interval between the two outpatient medical encounters (see *Development and Revisions* section below)

#### **Incidence rules:**

For individuals who meet the case definition:

- The incidence date is considered the date of the first inpatient or outpatient medical encounter that includes a defining diagnosis of PTSD.
- An individual is considered an incident case only once.

#### **Exclusions:**

- None

<sup>1</sup> Armed Forces Health Surveillance Center. Selected mental health disorders among active component members, U.S. Armed Forces, 2007-2010. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; 17(11): 2-5.



## Codes

The following ICD9 code is required for the case definition:

Condition	ICD-9-CM codes	CPT Codes
Post Traumatic Stress Disorder (PTSD)	309.81 (post traumatic stress disorder)	NA

## Development

This case definition was developed in November of 2009 by a working group consisting of representatives from AFHSC, the Defense Centers of Excellence (DCoE) for Psychological Health and Traumatic Brain Injury, and the Office of the Assistant Secretary of Defense for Health Affairs (HA) for the purpose of periodic AFHSC mental health report for HA.

### *Case Definition Incidence Rule Rationale*

- During the development process significant discussion and consideration were given to a possible two year date restriction between outpatient medical encounters. For the following reasons no date restriction is applied to the case definition: (1) the condition is chronic and the need for a date restriction is less important for certainty of diagnosis, and (2) to maintain consistency with the case definitions and incidence rules applied to the other mental health conditions in the AFHSC Mental Health Report for Health Affairs.

### *Code Set Determination and Rationale*

- Code lists used by the Agency for Health Research and Quality (AHRQ), Force Health Protection and Readiness (FHP&R) and DCoE were considered in the development of this definition.

## Reports

AFHSC reports on PTSD in the following reports:

- Quarterly: AFHSC Mental Health Report for HA.

## Revisions and Review

Sept 2010	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards (SMS) working group.
Nov 2009	Case definition reviewed and adopted by a HA, DCoE and AFHSC working group.
Sept 2008	Case definition developed and adopted by the DoD Interagency PTSD and Traumatic Brain Injury (TBI) standardization committee.

## Comments

None



## SCHIZOPHRENIA

### Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) for the purpose of descriptive epidemiological reports on mental disorders and mental health problems among active component service members.<sup>1</sup> The reports summarize numbers, rates, and trends of mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders).

### Clinical Description

Schizophrenia is a severe, frequently unremitting mental illness that involves symptoms of hallucinations, delusions, paranoia, disorganized speech, and other disorganized behavior. The etiology is unknown although genetic and environmental risk factors have been identified. Symptom onset is insidious, often beginning in adolescence and progressing until symptoms become severe enough to require medical attention. The syndrome often significantly affects occupational and social interactions, and earlier age at onset is associated with greater morbidity.<sup>2</sup> Complete remission of the disorder is rare.

#### Case Definition and Incidence Rules

For surveillance purposes, a case of schizophrenia is defined as:

- *One inpatient medical encounter* with any of the defining diagnoses of schizophrenia (see ICD9 code list below) in *any* diagnostic position; or
- *Four outpatient medical encounters* with any of the defining diagnoses of schizophrenia (see ICD9 code list below) in *any* diagnostic position.

#### Incidence rules:

For individuals who meet the case definition:

- The incidence date is considered the date of the first inpatient or outpatient medical encounter that includes a diagnosis of schizophrenia.
- An individual is considered an incident case *once per surveillance period*.

#### Exclusions:

- Schizophrenia cases that remained in active service for more than two years after meeting the surveillance case definition.

<sup>1</sup> Armed Forces Health Surveillance Center. Mental Disorders and Mental Health Problems, Active Component, U.S. Armed Forces, January 2000-December 2011. *Medical Surveillance Monthly Report (MSMR)*. 2012 June; Vol.19 (6): 11- 17.

<sup>2</sup> Armed Forces Health Surveillance Center. Mental Health Diagnosis During the Year Prior to Schizophrenia, U.S. Armed Forces, 2001-2010. *Medical Surveillance Monthly Report (MSMR)*. 2012 March; Vol.19(3): 10- 13.



## Codes

The following ICD-9 codes are included in the case definition:

Condition	ICD-9-CM codes	CPT Codes
Schizophrenic disorders	295.0x (simple type [0-5]) 295.1x (disorganized type [0-5]) 295.2x (catatonic type [0-5]) 295.3x (paranoid type [0-5]) 295.4x (schizophreniform disorder [0-5]) 295.5x (latent schizophrenia [0-5]) 295.6x (residual type [0-5]) 295.7x (schizoaffective disorder [0-5]) 295.8x (other specified types of schizophrenia [0-5]) 295.9x (unspecified schizophrenia [0-5])  <i>Fifth-digit subclassification for use with category 295</i> 0 unspecified 1 subchronic 2 chronic 3 subchronic with acute exacerbation 4 chronic with acute exacerbation 5 in remission	NA

## Development and Revisions

The case definitions described below were developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses. The most recent is used in a MSMR article on schizophrenia among active duty Service members <sup>2</sup> and for routine mental health reports that include schizophrenia<sup>1</sup>.

- March 2012: The case definition was updated to require: (1) *One inpatient medical encounter in any diagnostic position*; or (2) *Four outpatient medical encounters in any diagnostic position*. The criterion of *one outpatient medical encounter in a psychiatric or mental health care specialty setting* was removed (see *Case Definition and Incidence Rule Rationale* below)
- November 2010: The original case was developed by the AFHSC Medical Surveillance Monthly Report (MSMR) staff for the purpose of descriptive epidemiological reports on mental disorders and mental health problems among active component service members. The definition used the following case finding criteria: (1) *One inpatient medical encounter* with any of the defining diagnoses of schizophrenia in the *first or second* diagnostic position; or (2) *Two outpatient medical encounters, within 180 days* of each other, with any of the defining diagnoses of schizophrenia in the *first or second* diagnostic position; or (3) *One outpatient medical encounter in a psychiatric or mental health care specialty setting*, defined by Medical Expense and Performance Reporting System (MEPRS) code BF, with any of the defining diagnoses of schizophrenia in the *first or second* diagnostic position.



### *Case Definition and Incidence Rule Rationale*

- This case definition requires four outpatient encounters to define a case. Exploratory analysis of the Defense Medical Surveillance System (DMSS) data revealed that individuals hospitalized with schizophrenia have multiple follow-up visits. The assumption was made, on a population level, that individuals initially diagnosed in an outpatient setting would have similar numbers of follow-up visits as those diagnosed in an inpatient setting. Analysis showed that individuals with at least four outpatient encounters had numbers of follow-up visits similar to most inpatients, thus yielding optimal specificity.<sup>3</sup>
- *Exclusions:* Schizophrenia cases that remained in active service for more than two years after meeting the surveillance case definition were assumed to be misdiagnosed and excluded from the analysis. Experts from the Department of Psychiatry at the Uniformed Services University of Health Sciences (USUHS) consulted during the development of this case definition believed that an individual with schizophrenia would not be able to remain in active service and would be inevitably separated. Millikan and colleagues also reported that the median time between diagnosis of schizophrenia and medical evaluation board (MEB) was 1.6 years and the median time between MEB and discharge from service was an additional 4 months.<sup>4</sup> Thus, a period of two years was used.

### *Code Set Determination and Rationale*

- The code set and groupings of mental health disorder-specific diagnoses used in this case definition are based on code sets developed by the Agency for Healthcare Research and Quality (AHRQ).<sup>5</sup> The final code set was selected after a review of the scientific literature and of the relevant codes in the International Classification of Diseases, 9<sup>th</sup> Revision.

## **Reports**

AFHSC reports on schizophrenia in the following reports:

- Periodic MSMR articles on mental disorders and associated hospitalizations, outpatient medical encounters, and post-deployment illnesses.
- Annually: MSMR article on the “Absolute and relative morbidity burdens attributable to various illnesses and injuries U.S. Armed Forces” (see *Comments* section below).

## **Review**

July 2012	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards working group.
Nov 2010	Case definition developed and reviewed by AFHSC MSMR staff.

<sup>3</sup> Detailed information on this analysis is available through AFHSC MSMR staff; reference DMSS Request# R120079 (schizophrenia among active component – case definition update), 2012.

<sup>4</sup> 13. Millikan AM, Weber NS, Niebuhr DW, et al. Evaluation of data obtained from military disability medical administrative databases for service members with schizophrenia or bipolar disorder. *Mil Med.* Oct 2007;172(10):1032-1038.

<sup>5</sup> Agency for Healthcare Research and Quality website.

<http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp>; last accessed July 2012.



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## Comments

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*Burden of Disease Reports:* AFHSC articles and reports on the “burden” of illness and injury in the U.S. Armed Forces group all illness and injury-specific diagnoses, defined by ICD-9-CM codes, into 139 burden of disease-related conditions and 25 categories based on a modified version of the classification system developed for the Global Burden of Disease (GBD) Study.<sup>6</sup> In general, the GBD system groups diagnoses with common pathophysiologic or etiologic bases and/or significant international health policymaking importance.

The AFHSC disaggregates some diagnoses that are grouped into single categories in the GBD system (e.g., mental disorders) to increase the military relevance of the results. The category of mental health disorders is separated into the following sub-categories of “disorders”: anxiety, substance abuse, adjustment, mood, tobacco dependence, psychotic, personality, somatoform, and all other mental disorders.<sup>7</sup>

Because reports on disease burden are based on the total number of medical encounters for a specific condition, a slightly different case definition is used for these analyses. The case definition requires only “one inpatient or outpatient medical encounter with any defining ICD9 codes between 001 and 999” and uses the diagnosis in the *primary* diagnostic position only. An individual is allowed one medical encounter per condition per day.

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<sup>6</sup> The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. Murray, CJ and Lopez, AD, eds. Harvard School of Public Health (on behalf of the World Health Organization and The World Bank), 1996:120-2.

<sup>7</sup> Armed Forces Health Surveillance Center. Absolute and Relative Morbidity Burdens Attributable to Various Illnesses and Injuries, U.S. Armed Forces, 2011. *Medical Surveillance Monthly Report (MSMR)*. 2012 April; Vol.19 (4): 4- 9.



## SUBSTANCE DEPENDENCE

### *Case Definition for AFHSC Mental Health Report for Health Affairs*

#### Background

This case definition for substance dependence was developed in November of 2009 by a working group consisting of representatives from AFHSC, the Defense Centers of Excellence (DCoE) for Psychological Health and Traumatic Brain Injury, and the Office of the Assistant Secretary of Defense for Health Affairs (HA). The group developed definitions for this and four other mental health disorders in planning for a periodic AFHSC mental health report for HA.<sup>1</sup> The five conditions covered in the report are relatively common, often chronic in nature, and likely to adversely affect military service. Similar case definitions and incidence rules apply to all five mental health conditions included in the report.

#### Clinical Description

Substance dependence is a maladaptive pattern of substance use, leading to clinically significant impairment and distress. Substance use often results in tolerance, withdrawal, and compulsive substance use behavior. Denial of a substance problem is an inherent component of dependence. (*DSM-IV*)

#### Case Definition and Incidence Rules

For surveillance purposes, a case of substance dependence is defined as:

- *One inpatient medical encounter* with any of the defining diagnoses of substance dependence in *any* diagnostic position (see ICD9 code list below); or
- *Two outpatient medical encounters*, occurring on separate days, with any of the defining diagnoses of substance dependence in *any* diagnostic position (see ICD9 code list below).
- There is *no date restriction*, i.e., a restriction on the length of the time interval, between the two outpatient medical encounters (see *Development and Revisions* section below)

#### *Incidence rules:*

For individuals who meet the case definition:

- The incidence date is considered the date of the first inpatient or outpatient medical encounter that includes a defining diagnosis of substance dependence.
- An individual is considered an incident case only once.

#### *Exclusions:*

- None

<sup>1</sup> Armed Forces Health Surveillance Center. Selected mental health disorders among active component members, U.S. Armed Forces, 2007-2010. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; 17(11): 2-5.





## Codes

The following ICD9 codes are included in the case definition:

Condition	ICD-9-CM codes	CPT Codes
Substance Dependence	304.00-304.03 (opioid type dependence) 304.10-304.13 (sedative, hypnotic or anxiolytic dependence) 304.20-304.23 (cocaine dependence) 304.30-304.33 (cannabis dependence) 304.40-304.43 (amphetamine and other psychostimulant dependence) 304.50-304.53 (hallucinogen dependence) 304.60-304.63 (other specific drug dependence) 304.70-304.73 (combinations of opioid type drug with any other) 304.80-304.83 (combinations of drug dependence excluding opioid type drugs) 304.90-304.93 (unspecified drug dependence)	NA

## Development and Revisions

This case definition was developed in November of 2009 by a working group consisting of representatives from AFHSC, the Defense Centers of Excellence (DCoE) for Psychological Health and Traumatic Brain Injury, and the Office of the Assistant Secretary of Defense for Health Affairs (HA) for the purpose of periodic AFHSC mental health report for HA.

### Case Definition Incidence Rule Rationale

- During the development process significant discussion and consideration were given to a possible two year date restriction between outpatient medical encounters. For the following reasons no date restriction is applied to the case definition: (1) the condition is chronic and the need for a date restriction is less important for certainty of diagnosis, and (2) to maintain consistency with the case definitions and incidence rules applied to the other mental health conditions in the AFHSC Mental Health Report for Health Affairs.

### Code Set Determination and Rationale:

- ICD9 codes for *substance abuse* are not included in this case definition.
- ICD9 codes for *tobacco dependence* are not included in this case definition.
- ICD9 codes for *alcohol dependence* are not included in this case definition. See “Alcohol Dependence” case definition(s).
- Code lists used by the Agency for Health Research and Quality (AHRQ), Force Health Protection and Readiness (FHP&R) and DCoE were considered in the development of this definition.



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**Reports**

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AFHSC reports on substance dependence in the following reports:

- Quarterly: AFHSC Mental Health Report for HA.

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**Review**

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Sept 2010	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards (SMS) working group.
Nov 2009	Case definition developed, reviewed and adopted by HA, DCoE and AFHSC working group

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**Comments**

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None



## SUICIDE

### Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) for the purpose of epidemiological surveillance of a condition important to military-associated populations.

### Clinical Description

Suicide is “self-inflicted death with evidence (either explicit or implicit) of intent to die.”<sup>1</sup>

#### Case Definition and Incidence Rules

For surveillance purposes, a case of suicide is defined as:

- An individual whose manner of death is categorized as ‘Suicide’ in the Casualty Table provided to the AFHSC by the Armed Forces Medical Examiner (AFME). (See *Comments* section).
- Case definition includes *completed suicides only*.

#### Incidence rules:

- None

#### Exclusions:

- None

### Codes

The following ICD-9 codes are included in the case definition:

Condition	ICD-9-CM codes	CPT Codes
Suicide	NA	NA

### Development and Revisions

This case definition was determined by a consensus to adopt AFME’s case definition at the AFHSC’s Surveillance Methods and Standards (SMS) meeting in March 2010.

<sup>1</sup> OTSG/MEDCOM Policy Memo 09-032



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**Reports**

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None

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**Review**

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Mar 2010	Case definition reviewed and adopted by the AFHSC Surveillance Methods and Standards (SMS) working group.
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**Comments**

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- Case definition does *not* include incomplete suicide attempts.
- The AFME provides data on suicides in the form of a casualty table, which categorizes DoD active duty casualties by manner of death. Categories for manner of death include: accident, combat, homicide, natural, suicide, terrorist activity, pending and undetermined.
- The DoD Suicide Event Report (DoDSER) is the official source for DoD suicide events. The DoDSER is a surveillance program that standardizes suicide event reporting across the Services (OSD Memo from Dr. Clark).
- The AFSHC is *not* the official source of DoD suicide numbers.



## ADJUSTMENT DISORDERS

*Includes Adjustment Reaction to Chronic Stress; Does Not Include Acute Stress Reaction or Post Traumatic Stress Disorder (PTSD)*

*For PTSD, See “Post-Traumatic Stress Disorder” Case Definition.*

### Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) Medical Surveillance Monthly Report (MSMR) staff for the purpose of descriptive epidemiological reports on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The reports provide a comprehensive look at the status of mental health in the Services and provide in depth information on numbers, rates, and trends of adjustment disorders and other mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders).

### Clinical Description

An adjustment disorder is a psychological response to an identifiable stressor or group of stressors that cause(s) significant emotional or behavioral symptoms that do not meet criteria for one of the other Axis I disorders, (e.g., anxiety disorder, PTSD, acute stress disorder). Symptoms must occur within three months of the event(s) or stressor(s) and persist for no longer than six months after the stressor, or its consequences, have been removed.<sup>2</sup>

### Case Definition and Incidence Rules

For surveillance purposes, a case of adjustment disorder is defined as:

- *One inpatient medical encounter* with any of the defining diagnoses of adjustment disorder (see ICD9 code list below) in the *first or second* diagnostic position; or
- *Two outpatient medical encounters, within 180 days* of each other, with any of the defining diagnoses of adjustment disorder (see ICD9 code list below) in the *first or second* diagnostic position; or
- *One outpatient medical encounter in a psychiatric or mental health care specialty setting*, defined by Medical Expense and Performance Reporting System (MEPRS) code BF, with any of the defining diagnoses of adjustment disorder (see ICD9 code list below) in the *first or second* diagnostic position.

*(continued on next page)*

<sup>1</sup> Armed Forces Health Surveillance Center. Mental Disorders and Mental Health Problems, Active Component, U.S. Armed Forces, January 2000 – December 2009. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; Vol.17 (11): 6- 12.

<sup>2</sup> American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition. 1994.



### Case Definition and Incidence Rules (cont.)

#### Incidence rules:

For individuals who meet the case definition:

- The incidence date is considered the date of the first inpatient or outpatient medical encounter that includes a diagnosis of adjustment disorder.
- An individual is considered an incident case *once per surveillance period*.

#### Exclusions:

- None

### Codes

The following ICD-9 codes are included in the case definition:

Condition	ICD-9-CM codes	CPT Codes
Adjustment Disorders	<b>309 Adjustment Reaction</b> 309.0 (adjustment disorder with depressed mood) 309.1 (prolonged depressive reaction) 309.2x (prolonged depressive reaction with predominant disturbance of other emotions) 309.3 (adjustment disorder with disturbance of conduct) 309.4 (adjustment disorder with mixed disturbance of emotions and conduct) 309.8x (other specified adjustment reactions) <ul style="list-style-type: none"> <li>– 309.81 post-traumatic stress disorder (PTSD) is excluded</li> </ul> 309.9 (unspecified adjustment reactions)	NA

### Development and Revisions

This case definition was developed in November of 2010 by AFHSC MSMR staff for a MSMR article on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The case definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.



### *Case Definition and Incidence Rule Rationale*

- To increase the specificity of the case definition for outpatient encounters, two such encounters with the defining diagnoses are required. The period of 180 days was established to allow for the likelihood that “true” cases of adjustment disorder would have a second encounter within that interval. Also, adjustment disorders generally do not persist for longer than 6 months.

### *Code Set Determination and Rationale*

- The code set and groupings of mental health disorder-specific diagnoses used in this case definition are based on code sets developed by Garvey *et al.*<sup>3</sup> and Seal *et al.*<sup>4</sup> The final code set was selected after a review of the scientific literature and of the relevant codes in the International Classification of Diseases, 9<sup>th</sup> Revision.
- In the ICD-9-CM code manual, ICD9 code 309.81 (post-traumatic stress disorder) is included in the 309 (Adjustment reaction) series. This code is not included in the code set for this case definition because: (1) PTSD is generally categorized as an anxiety disorder - not an adjustment disorder - provoked by a severe psychological trauma; (2) adjustment disorders may occur in response to stressors of lesser severity; and (3) the symptoms of PTSD differ from those of adjustment disorders and tend to last longer.
- ICD9 codes 308.x (acute reaction to stress) are not included in this code set because adjustment disorders by definition are marked by a longer (>1 month) reaction or adjustment to stress.

### **Reports**

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AFHSC reports on adjustment disorders in the following reports:

- Periodic MSMR articles on mental disorders and associated hospitalizations, outpatient medical encounters, and post-deployment illnesses.
- Annually: MSMR article on the “Absolute and relative morbidity burdens attributable to various illnesses and injuries, U.S. Armed Forces” (see *Comments* section below).

### **Review**

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July 2012	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards working group.
Nov 2010	Case definition developed and reviewed by AFHSC MSMR staff.

<sup>3</sup> Garvey Wilson A, Messer S, Hoge C. U.S. military mental health care utilization and attrition prior to the wars in Iraq and Afghanistan. *Soc Psychiatry Psychiatr Epidemiol.* 2009;44(6):473-481.

<sup>4</sup> Seal KH, Bertenthal D, Miner CR, Sen S, Marmar C. Bringing the War Back Home: Mental Health Disorders Among 103 788 US Veterans Returning From Iraq and Afghanistan Seen at Department of Veterans Affairs Facilities. *Arch Intern Med.* March 12, 2007;167(5):476-482.



## Comments

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*Burden of Disease Reports:* AFHSC articles and reports on the “burden” of illness and injury in the U.S. Armed Forces group all illness and injury-specific diagnoses, defined by ICD-9-CM codes, into 139 burden of disease-related conditions and 25 categories based on a modified version of the classification system developed for the Global Burden of Disease (GBD) Study.<sup>5</sup> In general, the GBD system groups diagnoses with common pathophysiologic or etiologic bases and/or significant international health policymaking importance.

The AFHSC disaggregates some diagnoses that are grouped into single categories in the GBD system (e.g., mental disorders) to increase the military relevance of the results. The category of mental health disorders is separated into the following sub-categories of “disorders”: anxiety, substance abuse, adjustment, mood, tobacco dependence, psychotic, personality, somatoform, and all other mental disorders.<sup>6</sup>

Because reports on disease burden are based on the total number of medical encounters for a specific condition, a slightly different case definition is used for these analyses. The case definition requires only “one inpatient or outpatient medical encounter with any defining ICD9 codes between 001 and 999” and uses the diagnosis in the *primary* diagnostic position only. An individual is allowed one medical encounter per condition per day.

*Comprehensive AFHSC Mental Health Reports:* For analyses and reports requiring data on *all* mental disorders, AFHSC includes all mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders) with a few exceptions.

- ICD9 code 305.1 (tobacco use disorder) is not included as tobacco-cessation efforts are widespread within primary care clinics in the military and this diagnosis is not treated as a mental health disorder.
- ICD9 codes 299.xx (pervasive developmental disorders) and ICD9 codes 317.xx -319.xx (mild, other, and unspecified intellectual disabilities) are not included as these conditions do not represent mental health disorders that AFHSC is trying to track with these reports.

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<sup>5</sup> The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. Murray, CJ and Lopez, AD, eds. Harvard School of Public Health (on behalf of the World Health Organization and The World Bank), 1996:120-2.

<sup>6</sup> Armed Forces Health Surveillance Center. Absolute and Relative Morbidity Burdens Attributable to Various Illnesses and Injuries, U.S. Armed Forces, 2011. *Medical Surveillance Monthly Report (MSMR)*. 2012 April; Vol.19 (4): 4- 9.





## ALCOHOL USE DISORDERS

*Includes Alcohol Abuse and Alcohol Dependence*

### Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) Medical Surveillance Monthly Report (MSMR) staff for the purpose of descriptive epidemiological reports on mental disorders, including alcohol abuse and alcohol dependence, and mental health problems among active duty Service members.<sup>1</sup> The reports provide a comprehensive look at the status of mental health in the Services and provide in depth information on numbers, rates, and trends of alcohol use disorders and other mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders).

### Clinical Description

Alcohol *abuse* is a maladaptive pattern of alcohol use leading to clinically significant impairment or distress. The abuse is usually manifested by one or more of the following, occurring within a 12-month period: recurrent alcohol use resulting in a failure to fulfill major role obligations, use in situations that are physically hazardous, alcohol-related legal problems, and continued alcohol use despite persistent or recurrent social and interpersonal problems caused or exacerbated by the effects of alcohol.

Alcohol *dependence* is a maladaptive pattern of alcohol abuse leading to clinically significant impairment, distress, and hardship. There is a pattern of repeated alcohol use that often results in tolerance, withdrawal, and compulsive drinking behavior and a great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects. There are persistent desires to drink and unsuccessful efforts to cut down or control use. Denial of an alcohol abuse related problem is an inherent component of dependence.<sup>2</sup>

### Case Definition and Incidence Rules

For surveillance purposes, a case of an alcohol use disorder is defined as:

- *One inpatient medical encounter* with any of the defining diagnoses of an alcohol use disorder (see ICD9 code list below) in the *first or second* diagnostic position; or
- *Two outpatient medical encounters, within 180 days* of each other, with any of the defining diagnoses of an alcohol use disorder (see ICD9 code list below) in the *first or second* diagnostic position; or
- *One outpatient medical encounter in a psychiatric or mental health care specialty setting*, defined by Medical Expense and Performance Reporting System (MEPRS) code BF, with any of the defining diagnoses of an alcohol use related (see ICD9 code list below) in the *first or second* diagnostic position.

*(continued on next page)*

<sup>1</sup> Armed Forces Health Surveillance Center. Mental Disorders and Mental Health Problems, Active Component, U.S. Armed Forces, January 2000 – December 2009. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; Vol.17 (11): 6- 12.

<sup>2</sup> American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition. 1994.



### Case Definition and Incidence Rules (cont.)

#### Incidence rules:

For individuals who meet the case definition:

- The incidence date is considered the date of the first inpatient or outpatient medical encounter that includes a diagnosis of an alcohol use related disorder.
- An individual is considered an *incident case once per surveillance period*.

#### Exclusions:

- None

### Codes

The following ICD-9 codes are included in the case definition:

Condition	ICD-9-CM codes	CPT Codes
Alcohol dependence	<p><i>Fifth-digit subclassification for use with categories 303 and 305</i></p> <ul style="list-style-type: none"> <li>0 unspecified</li> <li>1 continuous</li> <li>2 episodic</li> <li>3 in remission</li> </ul> <hr/> <p><b>303 Alcohol dependence syndrome</b></p> <ul style="list-style-type: none"> <li>– 303.0x (acute alcoholic intoxication)</li> <li>– 303.9x (other and unspecified alcohol dependence)</li> </ul>	NA
Alcohol abuse	<p><b>305 Nondependent abuse of drugs</b></p> <p>305.0x (alcohol abuse)</p>	

### Development and Revisions

This case definition was developed in November of 2010 by AFHSC MSMR staff for a MSMR article on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The case definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.



### *Case Definition and Incidence Rule Rationale*

- To increase the specificity of the case definition for outpatient encounters, two such encounters with the defining diagnoses are required. The period of 180 days was established to allow for the likelihood that “true” cases of alcohol use disorders would have a second encounter within that interval.
- The requirement of two outpatient medical encounters to identify a case may underestimate the incidence and prevalence of alcohol abuse and dependence because, in the Armed Forces, some affected individuals may purposefully avoid seeking care for their disorders, so estimates of incidence derived from health care encounters will not capture all cases.

### *Code Set Determination and Rationale:*

- The code set and groupings of mental health disorder-specific diagnoses used in this case definition are based on code sets developed by Garvey *et al*<sup>3</sup> and Seal *et al*.<sup>4</sup> The final code set was selected after a review of the scientific literature and of the relevant codes in the International Classification of Diseases, 9<sup>th</sup> Revision.
- This case definition groups abuse and dependence together for the purposes of the analyses and reports dealing with all mental disorders. For other analyses focusing on abuse or dependence individually, or on a specific substance, a more narrowly drawn case definition would be more appropriate.

## **Reports**

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AFHSC reports on alcohol related disorders in the following reports:

- Periodic MSMR articles on mental disorders and associated hospitalizations, outpatient medical encounters, and post-deployment illnesses.
- Annually: MSMR article on the “Absolute and relative morbidity burdens attributable to various illnesses and injuries U.S. Armed Forces” (see *Comments* section below).
- Quarterly: AFHSC Mental Health Report for the Department of Defense (Office of the Assistant Secretary of Defense for Health Affairs) (see *Comments* section below)

## **Review**

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July 2012	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards working group.
Nov 2010	Case definition developed and reviewed by AFHSC MSMR staff.

<sup>3</sup> Garvey Wilson A, Messer S, Hoge C. U.S. military mental health care utilization and attrition prior to the wars in Iraq and Afghanistan. *Soc Psychiatry Psychiatr Epidemiol.* 2009;44(6):473-481.

<sup>4</sup> Seal KH, Bertenthal D, Miner CR, Sen S, Marmar C. Bringing the War Back Home: Mental Health Disorders Among 103 788 US Veterans Returning From Iraq and Afghanistan Seen at Department of Veterans Affairs Facilities. *Arch Intern Med.* March 12, 2007;167(5):476-482.



## Comments

**Burden of Disease Reports:** AFHSC articles and reports on the “burden” of illness and injury in the U.S. Armed Forces group all illness and injury-specific diagnoses, defined by ICD-9-CM codes, into 139 burden of disease-related conditions and 25 categories based on a modified version of the classification system developed for the Global Burden of Disease (GBD) Study.<sup>5</sup> In general, the GBD system groups diagnoses with common pathophysiologic or etiologic bases and/or significant international health policymaking importance.

The AFHSC disaggregates some diagnoses that are grouped into single categories in the GBD system (e.g., mental disorders) to increase the military relevance of the results. The category of mental health disorders is separated into the following sub-categories of “disorders”: anxiety, substance abuse, adjustment, mood, tobacco dependence, psychotic, personality, somatoform, and all other mental disorders.<sup>6</sup>

Because reports on disease burden are based on the total number of medical encounters for a specific condition, a slightly different case definition is used for these analyses. The case definition requires only “one inpatient or outpatient medical encounter with any defining ICD9 codes between 001 and 999” and uses the diagnosis in the *primary* diagnostic position only. An individual is allowed one medical encounter per condition per day.

**Comprehensive AFHSC Mental Health Reports:** For analyses and reports requiring data on *all* mental disorders, AFHSC includes all mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders) with a few exceptions.

- ICD9 code 305.1 (tobacco use disorder) is not included as tobacco-cessation efforts are widespread within primary care clinics in the military and this diagnosis is not treated as a mental health disorder.
- ICD9 codes 299.xx (pervasive developmental disorders) and ICD9 codes 317.xx -319.xx (mild, other, and unspecified intellectual disabilities) are not included as these conditions do not represent mental health disorders that AFHSC is trying to track with these reports.

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### Other AFHSC Alcohol Use Related Case Definitions:

- 1) Alcohol-related Diagnoses, Active Component, U.S. Armed Forces, 2001-2010. *Medical Surveillance Monthly Report (MSMR)*. 2011 October; Vol. 18(10): 9-13.

This report describes trends and demographic characteristics of *acute, chronic, and recurrent alcohol-related diagnoses* among active component members of the U.S. Armed Forces. The case definition includes the following criteria and ICD9 code set.

- *One inpatient or outpatient medical encounter* with any of the defining diagnoses of an alcohol-related diagnosis in *any* diagnostic position.
- A *recurrent case* is defined as an individual with three or more acute encounters separated by at least 30 days but occurring within 1 year of the first of the three diagnoses.

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<sup>5</sup> The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. Murray, CJ and Lopez, AD, eds. Harvard School of Public Health (on behalf of the World Health Organization and The World Bank), 1996:120-2.

<sup>6</sup> Armed Forces Health Surveillance Center. Absolute and Relative Morbidity Burdens Attributable to Various Illnesses and Injuries, U.S. Armed Forces, 2011. *Medical Surveillance Monthly Report (MSMR)*. 2012 April; Vol.19 (4): 4- 9.



- Code set includes the following ICD9 codes:
    - *Acute case:* 305.0x (alcohol abuse), 980.x (toxic effect of alcohol), 790.3 (excessive blood level of alcohol), and E860.x (accidental poisoning by alcohol, not elsewhere classified)
    - *Chronic case:* 303.0x (acute intoxication in presence of alcohol dependence), 291.x (alcohol-induced mental disorders), 303.9x (other and unspecified alcohol dependence, includes chronic alcoholism), 571.0-571.3 (alcoholic liver disease), 425.5 (alcoholic cardiomyopathy), 535.3x (alcoholic gastritis), 357.5 (alcoholic polyneuropathy), and V11.3 (personal history of alcoholism).
- 2) *AFHSC Mental Health Report for the Department of Defense (Office of the Assistant Secretary of Defense for Health Affairs):*<sup>7</sup> this report describes the incidence rates of, and proportions of the population affected by major depression, bipolar disorder, *alcohol dependence*, substance dependence and post-traumatic stress disorder. The case definition includes the following criteria and ICD9 code set.
- *One inpatient medical encounter* with any of the defining diagnoses in *any* diagnostic position.
  - *Two outpatient medical encounters, occurring on separate days*, with the defining diagnosis in *any* diagnostic position.
  - Code set includes the following ICD9 codes:
    - *Alcohol Dependence:* 303.90-303.93 (Other and unspecified alcohol dependence, chronic alcoholism, dipsomania)
- 3) Surveillance Snapshot: Recurrent medical encounters associated with alcohol-abuse –related diagnostic codes, active component, U.S. Armed Forces, 2001-2010. *Medical Surveillance Monthly Report (MSMR)*. 2012 February; Vol. 19(2): 23.

In an effort to distinguish treatment and counseling-related medical encounters for alcohol abuse from true recurrent cases, this surveillance snapshot excluded individuals with four or more medical encounters with a diagnosis of alcohol abuse within a 42-day period, assuming these cases were “likely treatment-related” (i.e., associated with rehabilitation programs) and not true recurrent cases.

<sup>7</sup> Armed Forces Health Surveillance Center. Selected mental health disorders among active component members, U.S. Armed Forces, 2007-2010. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; 17(11): 2-5.



## ANXIETY DISORDERS

*Includes Generalized Anxiety, Panic, Phobic, and Obsessive-Compulsive Disorders*

### Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) Medical Surveillance Monthly Report (MSMR) staff for the purpose of descriptive epidemiological reports on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The reports provide a comprehensive look at the status of mental health in the Services and provide in depth information on numbers, rates, and trends of anxiety disorders and other mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders).

### Clinical Description

Anxiety disorders encompass a broad range of mental illnesses. Generalized anxiety disorders are characterized by chronic and excessive worry about minor day-to-day problems. The worrying is usually severe and impedes an individual's social and occupational functioning. Individuals with phobias have a persistent fear that is excessive or unreasonable, cued by the presence or anticipation of a specific object or situation. Exposure to the phobic stimulus results in an immediate anxiety reaction or panic attack. Panic disorders are characterized by unexpected and repeated episodes of intense fear of disaster or of losing control even when there is no real danger. Attacks are often accompanied by physical symptoms of stress. Individuals with obsessive compulsive disorder experience obsessions (recurrent, persistent thoughts, impulses or images in excess of worries about real-life problems) and compulsions (repetitive behaviors such as hand washing, ordering, checking or mental acts such as praying, counting, repeating words silently) and are driven to perform these activities in response to an obsession.<sup>2,3</sup>

### Case Definition and Incidence Rules

For surveillance purposes, a case of anxiety disorder is defined as:

- *One inpatient medical encounter* with any of the defining diagnoses of anxiety disorder (see ICD9 code list below) in the *first or second* diagnostic position; or
- *Two outpatient medical encounters, within 180 days* of each other, with any of the defining diagnoses of anxiety disorder (see ICD9 code list below) in the *first or second* diagnostic position; or
- *One outpatient medical encounter in a psychiatric or mental health care specialty setting*, defined by Medical Expense and Performance Reporting System (MEPRS) code BF, with any of the defining diagnoses of anxiety disorder (see ICD9 code list below) in the *first or second* diagnostic position.

*(continued on next page)*

<sup>1</sup> Armed Forces Health Surveillance Center. Mental Disorders and Mental Health Problems, Active Component, U.S. Armed Forces, January 2000 – December 2009. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; Vol.17 (11): 6- 12.

<sup>2</sup> American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition. 1994.

<sup>3</sup> National Institute of Mental Health. Available at: <http://www.nimh.nih.gov/health/index.shtml> Accessed 23 May 2012.



### Case Definition and Incidence Rules (cont.)

#### Incidence rules:

For individuals who meet the case definition:

- The incidence date is considered the date of the first inpatient or outpatient medical encounter that includes a diagnosis of anxiety disorder.
- An individual is considered an incident case *once per surveillance period*.

#### Exclusions:

- None

### Codes

The following ICD-9 codes are included in the case definition:

Condition	ICD-9-CM codes	CPT Codes
Anxiety Disorders	<b>300 Anxiety, dissociative and somatoform disorders</b> <ul style="list-style-type: none"> <li>– 300.00 (anxiety state, unspecified)</li> <li>– 300.01 (panic disorder without agoraphobia)</li> <li>– 300.02 (generalized anxiety disorder)</li> <li>– 300.09 (other anxiety state)</li> <li>– 300.20 (phobia, unspecified)</li> <li>– 300.21 (agoraphobia with panic disorder)</li> <li>– 300.22 (agoraphobia without mention of panic attacks)</li> <li>– 300.23 (social phobia)</li> <li>– 300.29 (other isolated or specific phobias)</li> <li>– 300.3 (obsessive-compulsive disorders)</li> </ul>	NA

### Development and Revisions

This case definition was developed in November of 2010 by AFHSC MSMR staff for a MSMR article on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The case definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.



### Case Definition and Incidence Rule Rationale

- To increase the specificity of the case definition for outpatient encounters, two such encounters with the defining diagnoses are required. The period of 180 days was established to allow for the likelihood that “true” cases of anxiety disorder would have a second encounter within that interval.

### Code Set Determination and Rationale

- The code set and groupings of mental health disorder-specific diagnoses used in this case definition are based on code sets developed by Garvey *et al.*<sup>4</sup> and Seal *et al.*<sup>5</sup> The final code set was selected after a review of the scientific literature and of the relevant codes in the International Classification of Diseases, 9<sup>th</sup> Revision.

## Reports

AFHSC reports on anxiety disorders in the following reports:

- Periodic MSMR articles on mental disorders and associated hospitalizations, outpatient medical encounters, and post-deployment illnesses.
- Annually: MSMR article on the “Absolute and relative morbidity burdens attributable to various illnesses and injuries, U.S. Armed Forces.” (see *Comments* section below).

## Review

July 2012	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards working group.
Nov 2010	Case definition developed and reviewed by AFHSC MSMR staff.

## Comments

*Burden of Disease Reports:* AFHSC articles and reports on the “burden” of illness and injury in the U.S. Armed Forces group all illness and injury-specific diagnoses, defined by ICD-9-CM codes, into 139 burden of disease-related conditions and 25 categories based on a modified version of the classification system developed for the Global Burden of Disease (GBD) Study.<sup>6</sup> In general, the GBD system groups diagnoses with common pathophysiologic or etiologic bases and/or significant international health policymaking importance.

The AFHSC disaggregates some diagnoses that are grouped into single categories in the GBD system (e.g., mental disorders) to increase the military relevance of the results. The category of mental health disorders is separated into the following sub-categories of “disorders”: anxiety, substance abuse, adjustment, mood, tobacco dependence, psychotic, personality, somatoform, and all other mental disorders.<sup>7</sup>

<sup>4</sup> Garvey Wilson A, Messer S, Hoge C. U.S. military mental health care utilization and attrition prior to the wars in Iraq and Afghanistan. *Soc Psychiatry Psychiatr Epidemiol.* 2009;44(6):473-481.

<sup>5</sup> Seal KH, Bertenthal D, Miner CR, Sen S, Marmar C. Bringing the War Back Home: Mental Health Disorders Among 103 788 US Veterans Returning From Iraq and Afghanistan Seen at Department of Veterans Affairs Facilities. *Arch Intern Med.* March 12, 2007;167(5):476-482.

<sup>6</sup> The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. Murray, CJ and Lopez, AD, eds. Harvard School of Public Health (on behalf of the World Health Organization and The World Bank), 1996:120-2.

<sup>7</sup> Armed Forces Health Surveillance Center. Absolute and Relative Morbidity Burdens Attributable to Various Illnesses and Injuries, U.S. Armed Forces, 2011. *Medical Surveillance Monthly Report (MSMR).* 2012 April; Vol.19 (4): 4- 9.





Because reports on disease burden are based on the total number of medical encounters for a specific condition, a slightly different case definition is used for these analyses. The case definition requires only “*one inpatient or outpatient medical encounter* with any defining ICD9 codes between 001 and 999” and uses the diagnosis in the *primary* diagnostic position only. An individual is allowed one medical encounter per condition per day.

*Comprehensive AFHSC Mental Health Reports:* For analyses and reports requiring data on *all* mental disorders, AFHSC includes all mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders) with a few exceptions.

- ICD9 code 305.1 (tobacco use disorder) is not included as tobacco-cessation efforts are widespread within primary care clinics in the military and this diagnosis is not treated as a mental health disorder.
- ICD9 codes 299.xx (pervasive developmental disorders) and ICD9 codes 317.xx -319.xx (mild, other, and unspecified intellectual disabilities) are not included as these conditions do not represent mental health disorders that AFHSC is trying to track with these reports.



## DEPRESSIVE DISORDERS

*Includes Major Depression, Dysthymia, and Bipolar I Disorder*

### Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) Medical Surveillance Monthly Report (MSMR) staff for the purpose of descriptive epidemiological reports on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The reports provide a comprehensive look at the status of mental health in the Services and provide in depth information on numbers, rates, and trends of depressive disorders and other mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders).

### Clinical Description

Depressive disorders are mental illnesses characterized by a persistent, all-encompassing, low mood often accompanied by one or more of the following symptoms: weight loss or gain, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue, loss of interest or pleasure in normally enjoyable activities, diminished ability to think or concentrate, feelings of worthlessness or excessive guilt, and recurrent thoughts of death or suicide. Major depressive disorder manifests as a moderate to severe episode of depression lasting two or more weeks, while dysthymic disorder is characterized by ongoing, chronic depression often lasting for two or more years. Bipolar I disorder involves fluctuating episodes of mania and depression.<sup>2</sup>

### Case Definition and Incidence Rules

For surveillance purposes, a case of a depressive disorder is defined as:

- *One inpatient medical encounter* with any of the defining diagnoses of depressive disorder (see ICD9 code list below) in the *first or second* diagnostic position; or
- *Two outpatient medical encounters, within 180 days* of each other, with any of the defining diagnoses of a depressive disorder (see ICD9 code list below) in the *first or second* diagnostic position; or
- *One outpatient medical encounter in a psychiatric or mental health care specialty setting*, defined by Medical Expense and Performance Reporting System (MEPRS) code BF, with any of the defining diagnoses of a depressive disorder (see ICD9 code list below) in the *first or second* diagnostic position.

*(continued on next page)*

<sup>1</sup> Armed Forces Health Surveillance Center. Mental Disorders and Mental Health Problems, Active Component, U.S. Armed Forces, January 2000 – December 2009. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; Vol.17 (11): 6- 12.

<sup>2</sup> American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition. 1994.



### Case Definition and Incidence Rules (cont.)

#### Incidence rules:

For individuals who meet the case definition:

- The incidence date is considered the date of the first inpatient or outpatient medical encounter that includes a diagnosis of a depressive disorder.
- An individual is considered an incident case *once per surveillance period*.

#### Exclusions:

- None

### Codes

The following ICD-9 codes are included in the case definition:

Condition	ICD-9-CM codes	CPT Codes
Depressive Disorders	<p><b>296 Episodic mood disorders</b></p> <ul style="list-style-type: none"> <li>– 296.2 (major depressive disorder, single episode [0-5])</li> <li>– 296.3 (major depressive disorder, recurrent episode [0-5])</li> <li>– 296.5 (bipolar I disorder, most recent episode, or current; depressed [0-5])</li> </ul> <p><i>Fifth-digit sub-classification for use with categories 296.0-296.6:</i></p> <ul style="list-style-type: none"> <li>0 unspecified</li> <li>1 mild</li> <li>2 moderate</li> <li>3 severe, without mention of psychotic behavior</li> <li>4 severe, specified as with psychotic behavior</li> <li>5 in partial or unspecified remission</li> </ul> <hr/> <ul style="list-style-type: none"> <li>– 296.9 (other and unspecified episodic mood disorder)</li> <li>– 296.90 (unspecified episodic mood disorder)</li> <li>– 296.99 (other specified episodic mood disorder)</li> </ul> <p>300.4 (dysthymic disorder)</p> <p>311 (depressive disorder, not elsewhere classified)</p>	<p>NA</p> <p><i>Continued on next page</i></p>



## Development and Revisions

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This case definition was developed in November of 2010 by AFHSC MSMR staff for a MSMR article on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The case definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.

### *Case Definition and Incidence Rule Rationale*

- To increase the specificity of the case definition for outpatient encounters, two such encounters with the defining diagnoses are required. The period of 180 days was established to allow for the likelihood that “true” cases of a depressive disorder would have a second encounter within that interval.

### *Code Set Determination and Rationale*

- The code set and groupings of mental health disorder-specific diagnoses used in this case definition are based on code sets developed by Garvey *et al*<sup>3</sup> and Seal *et al*.<sup>4</sup> The final code set was selected after a review of the scientific literature and of the relevant codes in the International Classification of Diseases, 9<sup>th</sup> Revision.
- ICD9 code 311 (depressive disorder not elsewhere classified) is included in the code set for depressive disorders due to an AFHSC interest in maintaining a broad definition of depression. AFHSC recognizes this is a category that may lack specificity for diagnoses that meet the standard DSM-IV clinical criteria. Seal *et al*<sup>4</sup> includes ICD9 code 311 in the category “other mental health disorders.”
- ICD9 codes 296.25 (major depressive disorder, in partial or unspecified remission) and ICD-9 codes 296.35 (major depressive disorder, recurrent episode, in partial or unspecified remission) are included in the code set. Inclusion of these codes may result in overestimation of the incidence of illness in the population by counting some cases for which the onset of illness preceded a person's military service period; on the other hand exclusion of these codes would underestimate the prevalence of illness in the population.
- The code set does not include the fifth digit sub-classification 6 (in full remission) because, by itself, the code reflects the documentation of a diagnosis made prior to the surveillance period, so it should not be counted for either incidence or prevalence during the surveillance period.

## Reports

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AFHSC reports on depressive disorders in the following reports:

- Periodic MSMR articles on mental disorders and associated hospitalizations, outpatient medical encounters, and post-deployment illnesses.
- Annually: MSMR article on the “Absolute and relative morbidity burdens attributable to various illnesses and injuries U.S. Armed Forces” (see *Comments* section below).
- Quarterly: AFHSC Mental Health Report for the Department of Defense (Office of the Assistant Secretary of Defense for Health Affairs) (see *Comments* section below)

<sup>3</sup> Garvey Wilson A, Messer S, Hoge C. U.S. military mental health care utilization and attrition prior to the wars in Iraq and Afghanistan. *Soc Psychiatry Psychiatr Epidemiol*. 2009;44(6):473-481.

<sup>4</sup> Seal KH, Bertenthal D, Miner CR, Sen S, Marmar C. Bringing the War Back Home: Mental Health Disorders Among 103 788 US Veterans Returning From Iraq and Afghanistan Seen at Department of Veterans Affairs Facilities. *Arch Intern Med*. March 12, 2007;167(5):476-482.



## Review

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July 2012	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards working group.
Nov 2010	Case definition developed and reviewed by AFHSC MSMR staff.

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## Comments

*Burden of Disease Reports:* AFHSC articles and reports on the “burden” of illness and injury in the U.S. Armed Forces group all illness and injury-specific diagnoses, defined by ICD-9-CM codes, into 139 burden of disease-related conditions and 25 categories based on a modified version of the classification system developed for the Global Burden of Disease (GBD) Study.<sup>5</sup> In general, the GBD system groups diagnoses with common pathophysiologic or etiologic bases and/or significant international health policymaking importance.

The AFHSC disaggregates some diagnoses that are grouped into single categories in the GBD system (e.g., mental disorders) to increase the military relevance of the results. The category of mental health disorders is separated into the following sub-categories of “disorders”: anxiety, substance abuse, adjustment, mood, tobacco dependence, psychotic, personality, somatoform, and all other mental disorders.<sup>6</sup>

Because reports on disease burden are based on the total number of medical encounters for a specific condition, a slightly different case definition is used for these analyses. The case definition requires only “one inpatient or outpatient medical encounter with any defining ICD9 codes between 001 and 999” and uses the diagnosis in the *primary* diagnostic position only. An individual is allowed one medical encounter per condition per day.

*Comprehensive AFHSC Mental Health Reports:* For analyses and reports requiring data on *all* mental disorders, AFHSC includes all mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders) with a few exceptions.

- ICD9 code 305.1 (tobacco use disorder) is not included as tobacco-cessation efforts are widespread within primary care clinics in the military and this diagnosis is not treated as a mental health disorder.
- ICD9 codes 299.xx (pervasive developmental disorders) and ICD9 codes 317.xx -319.xx (mild, other, and unspecified intellectual disabilities) are not included as these conditions do not represent mental health disorders that AFHSC is trying to track with these reports.

*AFHSC Mental Health Report for the Department of Defense (Office of the Assistant Secretary of Defense for Health Affairs):*<sup>7</sup> this report describes the incidence rates of, and proportions of the population affected by major depression, bipolar disorder, alcohol dependence, substance dependence and post-traumatic stress disorder. The case definition includes the following criteria and ICD9 code set.

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<sup>5</sup> The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. Murray, CJ and Lopez, AD, eds. Harvard School of Public Health (on behalf of the World Health Organization and The World Bank), 1996:120-2.

<sup>6</sup> Armed Forces Health Surveillance Center. Absolute and Relative Morbidity Burdens Attributable to Various Illnesses and Injuries, U.S. Armed Forces, 2011. *Medical Surveillance Monthly Report (MSMR)*. 2012 April; Vol.19 (4): 4- 9.

<sup>7</sup> Armed Forces Health Surveillance Center. Selected mental health disorders among active component members, U.S. Armed Forces, 2007-2010. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; 17(11): 2-5.



- *One inpatient medical encounter* with any of the defining diagnoses in *any* diagnostic position.
- *Two outpatient medical encounters, occurring on separate days*, with the defining diagnosis in *any* diagnostic position.
- Code set includes the following ICD9 codes:
  - *Major Depression:* 296.20-296.26 (major depressive disorder, single episode; includes partial and full remission), 296.30-296.36 (major depressive disorder, recurrent episode), 296.90 (unspecified episodic mood disorder), 311 (depressive disorder, not elsewhere classified).
  - *Bipolar Disorder:* 296.00- 296.06 (bipolar I disorder, single manic episode; includes partial and full remission), 296.10-296.16 (manic disorder, recurrent episode), 296.40-296.46 (bipolar I, most recent episode, or current, manic), 296.50-296.56 (bipolar I, most recent episode, or current, depressed), 296.60-296.66 (bipolar I disorder, most recent episode, or current, mixed), 296.7 (bipolar I disorder, most recent episode, or current, unspecified), 296.80 (bipolar disorder, unspecified), 296.89 (Other – bipolar II disorder, manic-depressive psychosis, mixed type).



## PERSONALITY DISORDERS

### Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) Medical Surveillance Monthly Report (MSMR) staff for the purpose of descriptive epidemiological reports on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The reports provide a comprehensive look at the status of mental health in the Services and provide in depth information on numbers, rates, and trends of personality disorders and other mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders).

### Clinical Description

Personality disorders are a group of personality types that manifest as enduring patterns of psychological experience and behavior that markedly affect an individual's ability to function individually and interpersonally with others in social and occupational settings. In general, the behavior patterns are inflexible and pervasive across a wide range of situations and have often been present in the individual since adolescence or early adulthood. Currently the Diagnostic and Statistical Manual of Mental Disorders lists ten personality disorders, grouped in three clusters: 1) odd or eccentric disorders which includes paranoid, schizoid, and schizotypal personality disorder; 2) dramatic, emotional or erratic disorders which include antisocial, borderline, histrionic, and narcissistic personality disorder; and 3) anxious or fearful disorders which include avoidant, dependent, and obsessive-compulsive personality disorder.<sup>2</sup>

### Case Definition and Incidence Rules

For surveillance purposes, a case of a personality disorder is defined as:

- *One inpatient medical encounter* with any of the defining diagnoses of a personality disorder (see ICD9 code list below) in the *first or second* diagnostic position; or
- *Two outpatient medical encounters, within 180 days* of each other, with any of the defining diagnoses of a personality disorder (see ICD9 code list below) in the *first or second* diagnostic position; or
- *One outpatient medical encounter in a psychiatric or mental health care specialty setting*, defined by Medical Expense and Performance Reporting System (MEPRS) code BF, with any of the defining diagnoses of a personality disorder (see ICD9 code list below) in the *first or second* diagnostic position.

(continued on next page)

<sup>1</sup> Armed Forces Health Surveillance Center. Mental Disorders and Mental Health Problems, Active Component, U.S. Armed Forces, January 2000 – December 2009. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; Vol.17 (11): 6- 12.

<sup>2</sup> American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition. 1994.







	301.6 (dependent personality disorder) 301.7 (antisocial personality disorder) 301.8x (other personality disorders) <ul style="list-style-type: none"> <li>– 301.81 (narcissistic personality disorder)</li> <li>– 301.82 (avoidant personality disorder)</li> <li>– 301.83 (borderline personality disorder)</li> <li>– 301.84 (passive-aggressive personality)</li> <li>– 301.89 (other personality disorder)</li> </ul> 301.9 (unspecified personality disorder)	
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### Development and Revisions

This case definition was developed in November of 2010 by AFHSC MSMR staff for a MSMR article on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The case definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.

#### *Case Definition and Incidence Rule Rationale*

- To increase the specificity of the case definition for outpatient encounters, two such encounters with the defining diagnoses are required. The period of 180 days was established to allow for the likelihood that “true” cases of a personality disorder would have a second encounter within that interval.

#### *Code Set Determination and Rationale*

- The code set and groupings of mental health disorder-specific diagnoses used in this case definition are based on code sets developed by the Agency for Healthcare Research and Quality (AHRQ)<sup>3</sup>, Garvey *et al.*<sup>4</sup> and Seal *et al.*<sup>5</sup> The final code set was selected after a review of the scientific literature and of the relevant codes in the International Classification of Diseases, 9<sup>th</sup> Revision.

### Reports

AFHSC reports on personality disorders in the following reports:

- Periodic MSMR articles on mental disorders and associated hospitalizations, outpatient medical encounters, and post-deployment illnesses.
- Annually: MSMR article on the “Absolute and relative morbidity burdens attributable to various illnesses and injuries. U.S. Armed Forces.” (see *Comments* section below).

<sup>3</sup> Agency for Healthcare Research and Quality website.

<http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp>; last accessed July 2012.

<sup>4</sup> Garvey Wilson A, Messer S, Hoge C. U.S. military mental health care utilization and attrition prior to the wars in Iraq and Afghanistan. *Soc Psychiatry Psychiatr Epidemiol.* 2009;44(6):473-481.

<sup>5</sup> Seal KH, Bertenthal D, Miner CR, Sen S, Marmar C. Bringing the War Back Home: Mental Health Disorders Among 103 788 US Veterans Returning From Iraq and Afghanistan Seen at Department of Veterans Affairs Facilities. *Arch Intern Med.* March 12, 2007;167(5):476-482.



## Review

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Sept 2012	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards working group.
Nov 2010	Case definition developed and reviewed by AFHSC MSMR staff.

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## Comments

*Burden of Disease Reports:* AFHSC articles and reports on the “burden” of illness and injury in the U.S. Armed Forces group all illness and injury-specific diagnoses, defined by ICD-9-CM codes, into 139 burden of disease-related conditions and 25 categories based on a modified version of the classification system developed for the Global Burden of Disease (GBD) Study.<sup>6</sup> In general, the GBD system groups diagnoses with common pathophysiologic or etiologic bases and/or significant international health policymaking importance.

The AFHSC disaggregates some diagnoses that are grouped into single categories in the GBD system (e.g., mental disorders) to increase the military relevance of the results. The category of mental health disorders is separated into the following sub-categories of “disorders”: anxiety, substance abuse, adjustment, mood, tobacco dependence, psychotic, personality, somatoform, and all other mental disorders.<sup>7</sup>

Because reports on disease burden are based on the total number of medical encounters for a specific condition, a slightly different case definition is used for these analyses. The case definition requires only “one inpatient or outpatient medical encounter with any defining ICD9 codes between 001 and 999” and uses the diagnosis in the *primary* diagnostic position only. An individual is allowed one medical encounter per condition per day.

*Comprehensive AFHSC Mental Health Reports:* For analyses and reports requiring data on *all* mental disorders, AFHSC includes all mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders) with a few exceptions.

- ICD9 code 305.1 (tobacco use disorder) is not included as tobacco-cessation efforts are widespread within primary care clinics in the military and this diagnosis is not treated as a mental health disorder.
- ICD9 codes 299.xx (pervasive developmental disorders) and ICD9 codes 317.xx -319.xx (mild, other, and unspecified intellectual disabilities) are not included as these conditions do not represent mental health disorders that AFHSC is trying to track with these reports.

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<sup>6</sup> The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. Murray, CJ and Lopez, AD, eds. Harvard School of Public Health (on behalf of the World Health Organization and The World Bank), 1996:120-2.

<sup>7</sup> Armed Forces Health Surveillance Center. Absolute and Relative Morbidity Burdens Attributable to Various Illnesses and Injuries, U.S. Armed Forces, 2011. *Medical Surveillance Monthly Report (MSMR)*. 2012 April; Vol.19 (4): 4- 9.



## PSYCHOSES

*For Schizophrenia, see “Schizophrenia” case definition*

### Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) Medical Surveillance Monthly Report (MSMR) staff for the purpose of descriptive epidemiological reports on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The reports provide a comprehensive look at the status of mental health in the Services and provide in depth information on numbers, rates, and trends of psychosis and other mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders).

### Clinical Description

Psychoses are a component of certain serious mental disorders and are usually marked by an individual having false beliefs about what is taking place in reality. Psychotic symptoms often include delusions (believing something is true despite strong evidence to the contrary), hallucinations (seeing and hearing things that are not actually present), disorganized thoughts and speech, and disordered thinking.<sup>2</sup>

### Case Definition and Incidence Rules

For surveillance purposes, a case of psychosis is defined as:

- *One inpatient medical encounter* with any of the defining diagnoses of psychoses (see ICD9 code list below) in the *first or second* diagnostic position; or
- *Two outpatient medical encounters, within 180 days* of each other, with any of the defining diagnoses of psychoses (see ICD9 code list below) in the *first or second* diagnostic position; or
- *One outpatient medical encounter in a psychiatric or mental health care specialty setting*, defined by Medical Expense and Performance Reporting System (MEPRS) code BF, with any of the defining diagnoses of psychoses (see ICD9 code list below) in the *first or second* diagnostic position.

#### *Incidence rules:*

For individuals who meet the case definition:

- The incidence date is considered the date of the first inpatient or outpatient medical encounter that includes a diagnosis of psychoses.
- An individual is considered an incident case *once per surveillance period*.

*(continued on next page)*

<sup>1</sup> Armed Forces Health Surveillance Center. Mental Disorders and Mental Health Problems, Active Component, U.S. Armed Forces, January 2000 – December 2009. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; Vol.17 (11): 6- 12.

<sup>2</sup> American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition. 1994.



### Case Definition and Incidence Rules (cont.)

#### Exclusions:

- None

### Codes

The following ICD-9 codes are included in the case definition:

Condition	ICD-9-CM codes	CPT Codes
Delusional disorders	297.0 (paranoid state, simple) 297.1 (delusional disorder) 297.2 (paraphrenia) 297.3 (shared psychotic disorder) 297.8 (other specified paranoid states) 297.9 (unspecified paranoid state)	
Other nonorganic psychosis	298.0 (depressive type psychosis) 298.1 (excitatory type psychosis) 298.2 (reactive confusion) 298.3 (acute paranoid reaction) 298.4 (psychogenic paranoid psychosis) 298.8 (other and unspecified reactive psychosis) 298.9 (unspecified psychosis)	
Other psychosis	293.81 (psychotic disorder with delusions in conditions classified elsewhere) 293.82 (psychotic disorder with hallucinations in conditions classified elsewhere)	

### Development and Revisions

This case definition was developed in November of 2010 by AFHSC MSMR staff for a MSMR article on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The case definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.



### Case Definition and Incidence Rule Rationale

- To increase the specificity of the case definition for outpatient encounters, two such encounters with the defining diagnoses are required. The period of 180 days was established to allow for the likelihood that “true” cases of psychosis would have a second encounter within that interval.

### Code Set Determination and Rationale

- The code set and groupings of mental health disorder-specific diagnoses used in this case definition are based on code sets developed by the Agency for Healthcare Research and Quality (AHRQ)<sup>3</sup>, Garvey *et al.*,<sup>4</sup> and Seal *et al.*<sup>5</sup> The final code set was selected after a review of the scientific literature and of the relevant codes in the International Classification of Diseases, 9<sup>th</sup> Revision.

## Reports

AFHSC reports on psychosis in the following reports:

- Periodic MSMR articles on mental disorders and associated hospitalizations, outpatient medical encounters, and post-deployment illnesses.
- Annually: MSMR article on the “Absolute and relative morbidity burdens attributable to various illnesses and injuries, U.S. Armed Forces.” (see *Comments* section below).

## Review

Sept 2012	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards working group.
Nov 2010	Case definition developed and reviewed by AFHSC MSMR staff.

## Comments

*Burden of Disease Reports:* AFHSC articles and reports on the “burden” of illness and injury in the U.S. Armed Forces group all illness and injury-specific diagnoses, defined by ICD-9-CM codes, into 139 burden of disease-related conditions and 25 categories based on a modified version of the classification system developed for the Global Burden of Disease (GBD) Study.<sup>6</sup> In general, the GBD system groups diagnoses with common pathophysiologic or etiologic bases and/or significant international health policymaking importance.

The AFHSC disaggregates some diagnoses that are grouped into single categories in the GBD system (e.g., mental disorders) to increase the military relevance of the results. The category of mental health disorders is separated into the following sub-categories of “disorders”: anxiety, substance abuse,

<sup>3</sup> Agency for Healthcare Research and Quality website.

<http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp>; last accessed July 2012.

<sup>4</sup> Garvey Wilson A, Messer S, Hoge C. U.S. military mental health care utilization and attrition prior to the wars in Iraq and Afghanistan. *Soc Psychiatry Psychiatr Epidemiol.* 2009;44(6):473-481.

<sup>5</sup> Seal KH, Bertenthal D, Miner CR, Sen S, Marmar C. Bringing the War Back Home: Mental Health Disorders Among 103 788 US Veterans Returning From Iraq and Afghanistan Seen at Department of Veterans Affairs Facilities. *Arch Intern Med.* March 12, 2007;167(5):476-482.

<sup>6</sup> The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. Murray, CJ and Lopez, AD, eds. Harvard School of Public Health (on behalf of the World Health Organization and The World Bank), 1996:120-2.



adjustment, mood, tobacco dependence, psychotic, personality, somatoform, and all other mental disorders.<sup>7</sup>

Because reports on disease burden are based on the total number of medical encounters for a specific condition, a slightly different case definition is used for these analyses. The case definition requires only “one inpatient or outpatient medical encounter with any defining ICD9 codes between 001 and 999” and uses the diagnosis in the *primary* diagnostic position only. An individual is allowed one medical encounter per condition per day.

*Comprehensive AFHSC Mental Health Reports:* For analyses and reports requiring data on *all* mental disorders, AFHSC includes all mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders) with a few exceptions.

- ICD9 code 305.1 (tobacco use disorder) is not included as tobacco-cessation efforts are widespread within primary care clinics in the military and this diagnosis is not treated as a mental health disorder.
- ICD9 codes 299.xx (pervasive developmental disorders) and ICD9 codes 317.xx -319.xx (mild, other, and unspecified intellectual disabilities) are not included as these conditions do not represent mental health disorders that AFHSC is trying to track with these reports.
- ICD9 codes included in the code set are grouped into the following categories: adjustment disorders, alcohol use disorders, anxiety disorders, post-traumatic stress disorder, depressive disorders, personality disorders, schizophrenia, substance use disorders and mental health problems.

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<sup>7</sup> Armed Forces Health Surveillance Center. Absolute and Relative Morbidity Burdens Attributable to Various Illnesses and Injuries, U.S. Armed Forces, 2011. *Medical Surveillance Monthly Report (MSMR)*. 2012 April; Vol.19 (4): 4- 9.



## SUBSTANCE USE DISORDERS

*Includes Substance Abuse and Substance Dependence*

*For alcohol use disorders, see “Alcohol Use Disorders” case definition.*

### Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) Medical Surveillance Monthly Report (MSMR) staff for the purpose of descriptive epidemiological reports on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The reports provide a comprehensive look at the status of mental health in the Services and provide in depth information on numbers, rates, and trends of substance use disorders and other mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders).

### Clinical Description

Substance *abuse* is a maladaptive pattern of substance use leading to clinically significant impairment or distress. The abuse is usually manifested by one or more of the following, occurring within a 12-month period: recurrent substance use resulting in a failure to fulfill major role obligations, use in situations that are physically hazardous, substance-related legal problems, and continued substance use despite persistent or recurrent social and interpersonal problems caused or exacerbated by the effects of the substance.

Substance *dependence* is a maladaptive pattern of substance abuse leading to clinically significant impairment, distress, and hardship. There is a pattern of repeated substance use that often results in tolerance, withdrawal, and compulsive substance use behavior. There are persistent desires and unsuccessful efforts to cut down or control use, and a great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects. Denial of a substance abuse related problem is an inherent component of dependence.<sup>2</sup>

### Case Definition and Incidence Rules

For surveillance purposes, a case of a substance use disorder is defined as:

- *One inpatient medical encounter* with any of the defining diagnoses of a substance use disorder (see ICD9 code list below) in the *first or second* diagnostic position; or
- *Two outpatient medical encounters, within 180 days* of each other, with any of the defining diagnoses of a substance use disorder (see ICD9 code list below) in the *first or second* diagnostic position; or
- *One outpatient medical encounter in a psychiatric or mental health care specialty setting*, defined by Medical Expense and Performance Reporting System (MEPRS) code BF, with any of the defining diagnoses of a substance use disorder (see ICD9 code list below) in the *first or second* diagnostic position.

*(continued on next page)*

<sup>1</sup> Armed Forces Health Surveillance Center. Mental Disorders and Mental Health Problems, Active Component, U.S. Armed Forces, January 2000 – December 2009. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; Vol.17 (11): 6- 12.

<sup>2</sup> American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition, 1994.



### Case Definition and Incidence Rules (cont.)

#### Incidence rules:

For individuals who meet the case definition:

- The incidence date is considered the date of the first inpatient or outpatient medical encounter that includes a diagnosis of a substance use disorder.
- An individual is considered an incident case *once per surveillance period*.

#### Exclusions:

- None

### Codes

The following ICD-9 codes are included in the case definition:

Condition	ICD-9-CM codes	CPT Codes
Drug dependence	<p><i>Fifth-digit subclassification for use with categories 304 and 305</i></p> <p>0 unspecified 1 continuous 2 episodic 3 in remission</p> <hr/> <p>304.0x (opioid type dependence) 304.1x (sedative, hypnotic or anxiolytic dependence) 304.2x (cocaine dependence) 304.3x (cannabis dependence) 304.4x (amphetamine and other psychostimulant dependence) 304.5x (hallucinogen dependence) 304.6x (other specified drug dependence) 304.7x (combinations of opioid type drug with any other) 304.8x (combinations of drug dependence excluding opioid type drug) 304.9x (unspecified drug dependence)</p>	NA
Nondependent abuse of drugs	<p>305.2x (cannabis abuse) 305.3x (hallucinogen abuse) 305.4x (sedative, hypnotic or anxiolytic abuse)</p>	(continued on next page)





	305.5x (opioid abuse) 305.6x (cocaine abuse) 305.7x (amphetamine or related acting sympathomimetic abuse) 305.8x (antidepressant type abuse) 305.9x (other, mixed, or unspecified drug abuse)	
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### Development and Revisions

This case definition was developed in November of 2010 by AFHSC MSMR staff for a MSMR article on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The case definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.

#### *Case Definition and Incidence Rule Rationale*

- To increase the specificity of the case definition for outpatient encounters, two such encounters with the defining diagnoses are required. The period of 180 days was established to allow for the likelihood that “true” cases of substance use disorders would have a second encounter within that interval.
- This requirement of two outpatient medical encounters to identify a case may underestimate the incidence and prevalence of substance abuse and dependence because, in the Armed Forces, some affected individuals may purposefully avoid seeking care for their disorders, so estimates of incidence derived from health care encounters will not capture all cases.

#### *Code Set Determination and Rationale:*

- The code set and groupings of mental health disorder-specific diagnoses used in this case definition are based on code sets developed by Garvey *et al.*<sup>3</sup> and Seal *et al.*<sup>4</sup> The final code set was selected after a review of the scientific literature and of the relevant codes in the International Classification of Diseases, 9<sup>th</sup> Revision.
- This case definition groups abuse and dependence together for the purposes of the analyses and reports dealing with all mental disorders. For other analyses focusing on abuse or dependence individually, or on a specific substance, a more narrowly drawn case definition would be more appropriate.
- ICD-9 code 305.1 (tobacco use disorder) is not included in the code set because this disorder is not associated with the significant impairment, distress, or hardship present in the other disorders in this case definition. Tobacco use is, however, marked by the typical characteristics of dependence and by major risks to the user’s physical health.

<sup>3</sup> Garvey Wilson A, Messer S, Hoge C. U.S. military mental health care utilization and attrition prior to the wars in Iraq and Afghanistan. *Soc Psychiatry Psychiatr Epidemiol.* 2009;44(6):473-481.

<sup>4</sup> Seal KH, Bertenthal D, Miner CR, Sen S, Marmar C. Bringing the War Back Home: Mental Health Disorders Among 103 788 US Veterans Returning From Iraq and Afghanistan Seen at Department of Veterans Affairs Facilities. *Arch Intern Med.* March 12, 2007;167(5):476-482.



## Reports

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AFHSC reports on substance related disorders in the following reports:

- Periodic MSMR articles on mental disorders and associated hospitalizations, outpatient medical encounters, and post-deployment illnesses.
- Annually: MSMR article on the “Absolute and relative morbidity burdens attributable to various illnesses and injuries U.S. Armed Forces” (see *Comments* section below).
- Quarterly: AFHSC Mental Health Report for the Department of Defense (Office of the Assistant Secretary of Defense for Health Affairs) (see *Comments* section below)

## Review

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July 2012	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards working group.
Nov 2010	Case definition developed and reviewed by AFHSC MSMR staff.

## Comments

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*Burden of Disease Reports:* AFHSC articles and reports on the “burden” of illness and injury in the U.S. Armed Forces group all illness and injury-specific diagnoses, defined by ICD-9-CM codes, into 139 burden of disease-related conditions and 25 categories based on a modified version of the classification system developed for the Global Burden of Disease (GBD) Study.<sup>5</sup> In general, the GBD system groups diagnoses with common pathophysiologic or etiologic bases and/or significant international health policymaking importance.

The AFHSC disaggregates some diagnoses that are grouped into single categories in the GBD system (e.g., mental disorders) to increase the military relevance of the results. The category of mental health disorders is separated into the following sub-categories of “disorders”: anxiety, substance abuse, adjustment, mood, tobacco dependence, psychotic, personality, somatoform, and all other mental disorders.<sup>6</sup>

Because reports on disease burden are based on the total number of medical encounters for a specific condition, a slightly different case definition is used for these analyses. The case definition requires only “one inpatient or outpatient medical encounter with any defining ICD9 codes between 001 and 999” and uses the diagnosis in the *primary* diagnostic position only. An individual is allowed one medical encounter per condition per day.

*Comprehensive AFHSC Mental Health Reports:* For analyses and reports requiring data on *all* mental disorders, AFHSC includes all mental health diagnoses that fall within the range of ICD-9-CM codes 290-319 (mental disorders) with a few exceptions.

- ICD9 code 305.1 (tobacco use disorder) is not included as tobacco-cessation efforts are widespread within primary care clinics in the military and this diagnosis is not treated as a mental health disorder.

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<sup>5</sup> The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020. Murray, CJ and Lopez, AD, eds. Harvard School of Public Health (on behalf of the World Health Organization and The World Bank), 1996:120-2.

<sup>6</sup> Armed Forces Health Surveillance Center. Absolute and Relative Morbidity Burdens Attributable to Various Illnesses and Injuries, U.S. Armed Forces, 2011. *Medical Surveillance Monthly Report (MSMR)*. 2012 April; Vol.19 (4): 4- 9.



- ICD9 codes 299.xx (pervasive developmental disorders) and ICD9 codes 317.xx -319.xx (mild, other, and unspecified intellectual disabilities) are not included as these conditions do not represent mental health disorders that AFHSC is trying to track with these reports.

***Other Substance Use Related Case Definitions:***

- 1) *AFHSC Mental Health Report for the Department of Defense (Office of the Assistant Secretary of Defense for Health Affairs):*<sup>7</sup>

This report describes the incidence rates of, and proportions of the population affected by major depression, bipolar disorder, alcohol dependence, *substance dependence* and post-traumatic stress disorder. The case definition includes the following criteria and ICD9 code set.

- *One inpatient medical encounter* with any of the defining diagnoses in *any* diagnostic position.
- *Two outpatient medical encounters, occurring on separate days*, with the defining diagnosis in *any* diagnostic position.
- Code set includes the following ICD9 codes:
  - *Substance Dependence:* 304.00-304.03 (opioid type dependence), 304.10-304.13 (sedative, hypnotic or anxiolytic dependence), 304.20-304.23 (cocaine dependence), 304.30-304.33 (cannabis dependence), 304.40-304.43 (amphetamine and other psychostimulant dependence), 304.50-304.53 (hallucinogen dependence), 304.60-304.63 (other specific drug dependence), 304.70-304.73 (combinations of opioid type drug with any other), 304.80-304.83 (combinations of drug dependence excluding opioid type drugs), 304.90-304.93 (unspecified drug dependence)

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<sup>7</sup> Armed Forces Health Surveillance Center. Selected mental health disorders among active component members, U.S. Armed Forces, 2007-2010. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; 17(11): 2-5.



## MENTAL HEALTH PROBLEMS

### *Problems Defined by V-Codes Related to Relationships, Family, Maltreatment, Life Circumstances, and Substance Abuse Counseling*

#### Background

This case definition was developed by the Armed Forces Health Surveillance Center (AFHSC) Medical Surveillance Monthly Report (MSMR) staff for the purpose of descriptive epidemiological reports on mental health *problems* among active duty Service members.<sup>1</sup> The terminology, code set, and groupings of mental health problems used in this definition are based on code sets developed by Garvey *et al*<sup>2</sup> and Seal *et al*<sup>3</sup> to capture mental health care documented with diagnostic codes outside of the range of ICD9 codes 290–319 (mental disorders). Mental health V-coded diagnoses –referred to in this document as “mental health problems” -- include a variety of problems that do not meet the criteria for a mental health *disorder* as defined by specific criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)<sup>4</sup> but are important areas of behavioral health interventions.

#### Clinical Description

Mental health problems are life circumstances, often related to relationships and family, identified in the clinical setting that influence an individual’s health status or care, but are not considered a current illness or injury. The presenting problem is usually the focus of treatment; however, the individual has no mental health condition that meets the DSM-IV criteria for a mental health disorder.

#### Case Definition and Incidence Rules

For surveillance purposes, a case of a mental health problem is defined as:

- *One inpatient medical encounter* with any of the defining diagnoses of a mental health problem (see ICD9 code list below) in the *first or second* diagnostic position; or
- *Two outpatient medical encounters, within 180 days* of each other, with any of the defining diagnoses of a mental health problem (see ICD9 code list below) in the *first or second* diagnostic position; or
- *One outpatient medical encounter in a psychiatric or mental health care specialty setting*, defined by Medical Expense and Performance Reporting System (MEPRS) code BF, with any of the defining diagnoses of a mental health problem (see ICD9 code list below) in the *first or second* diagnostic position.

*(continued on next page)*

<sup>1</sup> Armed Forces Health Surveillance Center. Mental Disorders and Mental Health Problems, Active Component, U.S. Armed Forces, January 2000 – December 2009. *Medical Surveillance Monthly Report (MSMR)*. 2010 November; Vol.17 (11): 6-12.

<sup>2</sup> Garvey-Wilson A, Messer S, Hoge C. U.S. military mental health care utilization and attrition prior to the wars in Iraq and Afghanistan. *Soc Psychiatry Psychiatr Epidemiol*. 2009;44(6):473-481.

<sup>3</sup> Seal KH, Bertenthal D, Miner CR, Sen S, Marmar C. Bringing the War Back Home: Mental Health Disorders Among 103 788 US Veterans Returning From Iraq and Afghanistan Seen at Department of Veterans Affairs Facilities. *Arch Intern Med*. March 12, 2007;167(5):476-482.

<sup>4</sup> American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition. 1994.





	<ul style="list-style-type: none"> <li>– V61.10 (counseling for marital and partner problems, unspecified)</li> </ul> <p><i>Category excludes:</i> V61.11 and V61.12 (see maltreatment-related problems below)</p>	
Family circumstance problems	<p>V61.2x (parent-child problems)</p> <ul style="list-style-type: none"> <li>– V61.20 (counseling for parent-child problem; unspecified)</li> <li>– V61.23 (counseling for parent-biological child problem)</li> <li>– V61.24 (counseling for parent-adopted child problem)</li> <li>– V61.25 (counseling for parent, guardian, -foster child problem)</li> <li>– V61.29 (other parent-child problems)</li> </ul> <p>V61.8 (other specified family circumstances)</p> <p>V61.9 (unspecified family circumstance)</p> <p><i>Category excludes:</i> V61.21 and V61.22 (see maltreatment-related problems below)</p>	
Maltreatment-related problems	<p>V61.11 (counseling for victim of spousal and partner abuse)</p> <p>V61.12 (counseling for perpetrator of spousal and partner abuse)</p> <p>V61.21 (counseling for victim of child abuse)</p> <p>V61.22 (counseling for perpetrator of parental child abuse)</p> <p>V62.83 (counseling for perpetrator of physical/sexual abuse)</p> <p>995.8 (other specified adverse effects, not elsewhere classified)</p> <ul style="list-style-type: none"> <li>– 995.80 (adult maltreatment, unspecified)</li> <li>– 995.81 (adult physical abuse)</li> <li>– 995.82 (adult emotion/psychological abuse)</li> <li>– 995.83 (adult sexual abuse)</li> <li>– 995.84 (adult neglect, nutritional)</li> <li>– 995.85 (other adult abuse and neglect)</li> </ul>	
Life circumstance problems	<p>V62.xx (other psychosocial circumstances)</p> <ul style="list-style-type: none"> <li>– V62.0 (unemployment)</li> <li>– V62.1 (adverse effects of work environment)</li> <li>– V62.2x (other occupational circumstances or maladjustment) <ul style="list-style-type: none"> <li>• V62.21 (personal current military deployment status)</li> <li>• V62.22 (personal history of return from military deployment)</li> </ul> </li> </ul>	(continued on next page)



	<ul style="list-style-type: none"> <li>• V62.29 (other occupational circumstances or maladjustment)</li> <li>– V62.3 (educational circumstances)</li> <li>– V62.4 (social maladjustment)</li> <li>– V62.5 (legal circumstances)</li> <li>– V62.8 (other psychological or physical stress, not elsewhere classified)</li> <li>• V62.81 (interpersonal problems, not elsewhere classified)</li> <li>• V62.82 (bereavement, uncomplicated)</li> <li>• V62.84 (suicidal ideation)</li> <li>• V62.85 (homicidal ideation)</li> <li>• V62.89 (other)</li> </ul> <p><i>Category excludes:</i> V62.6 (refusal of treatment for reasons of religion or conscience)</p>	
Mental, behavioral problems and substance abuse	<p>V40.xx (mental and behavior problems)</p> <ul style="list-style-type: none"> <li>– V40.2 (other mental problems)</li> <li>– V40.3 (other behavioral problems)</li> <li>– V40.9 (unspecified mental or behavioral problem)</li> </ul> <p>V65.42 (counseling on substance use and abuse)</p> <p><i>Category excludes:</i> V40.0 (problems with learning) and V40.1 (problems with communications, including speech)</p>	

### Development and Revisions

This case definition was developed in November of 2010 by AFHSC MSMR staff for a MSMR article on mental disorders and mental health problems among active duty Service members.<sup>1</sup> The case definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.

#### *Case Definition and Incidence Rule Rationale*

- To increase the specificity of the case definition for outpatient encounters, two such encounters with the defining diagnoses are required. The period of 180 days was established to allow for the likelihood that “true” mental health problems would have a second encounter within that interval.

#### *Code Set Determination and Rationale*

- The code set and groupings of mental health problems used in this case definition are based on code sets developed by Garvey *et al.*<sup>2</sup> and Seal *et al.*<sup>3</sup> The code set includes all ICD9 codes indicative of a mental health *problem* that are outside the range of 290–319 (mental *disorders*). All codes are V-codes with the inclusion of ICD9 code 995.8 (other specified adverse effects, not elsewhere classified).
- The final code set was selected after a review of the scientific literature and of the relevant codes in the International Classification of Diseases, 9<sup>th</sup> Revision.



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**Reports**

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AFHSC reports on mental health problems in the following reports:

- Periodic MSMR articles on mental disorders and associated hospitalizations, outpatient medical encounters, and post-deployment illnesses.
- Annually: MSMR article on the “Absolute and relative morbidity burdens attributable to various illnesses and injuries U.S. Armed Forces” (see *Comments* section below).

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**Review**

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Nov 2012	Case definition reviewed and adopted by AFHSC Surveillance Methods and Standards working group.
Nov 2010	Case definition developed and reviewed by AFHSC MSMR staff.

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**Comments**

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None

